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09/845,319	05/01/2001	Tomihiko Azuma	Q64335	2242

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EXAMINER
HA, LEYNNA A

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/845,319	AZUMA, TOMIHIKO
	Examiner	Art Unit
	LEYNNA T. HA	2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 12-20* is/are pending in the application.

    4a) Of the above claim(s) *11 and 21* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 12-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-21 have been re-examined and are pending.

Applicant has canceled claims 11 and 21.

2.   Claims 11 and 21 was previously rejected under 35 U.S.C. 112, 1st

paragraph is now withdrawn due to claims 11 and 12 being cancelled.

3.   This is a Final rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   **Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipate**

by Marchant, et al. (US 6,240,183).

As per claim 1:

Marchant discloses a user authentication method for checking whether a

user is qualified for using a service provided through a network, comprising:

a step of registration of user authentication information to register a numerical calculation method designated by said user and being specific to said user **[col.5, lines 55-62 and col.7, lines 6-13]** said user authentication information together with user identification information corresponding to said user; and **[col.2, lines 10-15 and col.9, lines 34-67]**

a step of judging, to perform user authentication, wherein when said user identification information is transmitted from said user through said network to a service providing site **[col.10, lines 23-50]** and an arbitrary numeric value is transmitted from said service providing site through said network to said user, a determination of whether a first calculation result, which is obtained by said user using said arbitrary numeric value in said registered numerical calculation method **[col.8, lines 55 – col.9, line 9]**, and is transmitted from said user through said network to said service providing site equals a second calculation result which is obtained by said service providing site by applying said arbitrary numeric value to said registered numerical calculation method. **[col.6, lines 40-50 and col.8, lines 3-19]**

As per claim 2:

Marchant discloses a user authentication method for checking whether a user is qualified for using a service provided through a network, comprising:

a step of registration of user authentication information to register a numerical calculation method designated by said user **[col.5, lines 55-62 and col.7, lines 6-13]** through said network and being specific to said user as said

user authentication information together with user identification information corresponding to said user; and   [col.2, lines 10-15 and col.9, lines 34-67]

a step of judging to perform user authentication, wherein when said user identification information is transmitted from said user through said network to a service providing site [col.10, lines 23-50] and an arbitrary numeric value is transmitted from said service providing site through said network to said user [col.8, lines 55 – col.9, line 9], a first calculation result corresponding to said arbitrary numeric value is obtained by user using said registered numerical calculation method and is transmitted from said user through said network to said service providing site, and a determination of whether said first calculation result equals a second calculation result which is obtained by said service providing site by applying said arbitrary numeric value to said registered numerical calculation method,   [col.6, lines 40-50 and col.8, lines 3-19]

wherein, when said first calculation result equals said second calculation result, said user is authorized. [col.11, lines 23-40]

As per claim 3:

Marchant discloses a network system comprising:

one or a plurality of user terminals by which a user transmits a numerical calculation method being specific to said user together with user identification information corresponding to said user [col.5, lines 55-62 and col.7, lines 6-13] through a network to a service providing site [col.2, lines 10-15 and col.9, lines 34-67] and said one or plurality of user terminals transmits a first calculation result obtained by applying a given numeric value to said numerical calculation

method through said network to said service providing site; and **[col.10, lines 23-50]**

one or a plurality of service providing sites to register said numerical calculation method together with said user identification information corresponding to said user **[col.2, lines 10-15 and col.9, lines 34-67]**, to transmit an arbitrary numeric value through said network to said user terminal when said user identification information is transmitted from said user terminal through said network **[col.8, lines 55 – col.9, line 9]**, and to judge, when said first calculation result corresponding to said arbitrary numeric value is transmitted from said user terminal through said network, whether said first calculation result equals a second calculation result which obtained by said one or plurality of service providing sites **[col.6, lines 40-50 and col.8, lines 3-19]** by applying said arbitrary numeric value to said registered numerical calculation method to perform said user authentication. **[col.11, lines 23-40]**

As per claim 4:   See col.8, lines 55 – col.9, line 9 and col.11, lines 23-40; discussing the user terminal has a function of displaying said arbitrary numeric value transmitted from said service providing site.

As per claim 5:   See col.4, lines 43-57; discussing the user terminal has a function of outputting, by voice, said arbitrary numeric value transmitted from said service providing site.

As per claim 6:   See col.4, lines 43-50; discussing the network system according to claim 3, wherein said user terminal is made up of a portable cellular

phone or a personal digital assistant, having a function of displaying said arbitrary numeric value transmitted from said service providing site.

As per claim 7:   **See col.4, lines 43-50;** discussing the user terminal is made up of a portable cellular phone or a personal digital assistant, having a function of outputting, by voice, said arbitrary numeric value transmitted from said service providing site.

As per claim 8:   **See col.4, lines 43-57;** discussing the first calculation result is input by voice of said user to said user terminal and is transmitted through said network to said service providing site and wherein said service providing site has a function of performing voice recognition of said first calculation result. **[col.11, lines 23-40]**

As per claim 9:

Marchant discloses a storage medium storing a control program to have a computer carry out a user authentication method for checking whether a user is qualified for using a service provided through a network, said method comprising:

a step of registration of user authentication information to register a numerical calculation method designated by said user **[col.5, lines 55-62 and col.7, lines 6-13]** and being specific to said user as said user authentication information together with user identification information corresponding to said user; and **[col.2, lines 10-15 and col.9, lines 34-67]**

a step of judging to perform user authentication, wherein when said user identification information is transmitted from said user through said network to a

service providing site **[col.10, lines 23-50]** and an arbitrary numeric value is transmitted from said service providing site through said network to said user **[col.8, lines 55 – col.9, line 9]**, a determination of whether a first calculation result which is obtained by said user using said arbitrary numeric value and is transmitted from said user through said network to said service providing site equals a second calculation result which is obtained by said service providing site by applying said arbitrary numeric value to said registered numerical calculation method, **[col.6, lines 40-50 and col.8, lines 3-19]**

wherein, when said first calculation result equals said second calculation result, said user is authorized. **[col.11, lines 23-40]**

As per claim 10:

Marchant discloses a storage medium storing a control program to have a computer carry out a user authentication method for checking whether a user is qualified for using a service provided through a network, said method comprising:

a step of registration of user authentication information to register a numerical calculation method designated by said user **[col.5, lines 55-62 and col.7, lines 6-13]** through said network and being specific to said user as said user authentication information together with user identification information corresponding to said user; and **[col.2, lines 10-15 and col.9, lines 34-67]**

a step of judging to perform user authentication, wherein when said user identification information is transmitted from said user through said network to a service providing site **[col.10, lines 23-50]** and an arbitrary numeric value is transmitted from said service providing site through said network to said user

[col.8, lines 55 – col.9, line 9], a first calculation result corresponding to said

arbitrary numeric value **[col.10, lines 8-35]** is obtained by said user using said

registered numerical calculation method and is transmitted from said user

through said network to said service providing site, and a determination of

whether said first calculation result equals a second calculation result which is

obtained by said service providing site by applying said arbitrary numeric value to

said registered numerical calculation method to perform said user authentication,

[col.6, lines 40-50 and col.8, lines 3-19]

wherein, when said first calculation result equals said second calculation

result, said user is authorized. **[col.11, lines 23-40]**

As per claim 11:

Marchant discloses a storage medium storing a control program to have a

computer carry out a network system comprising:

one or a plurality of user terminals by which a user transmits a numerical

calculation method being specific to said user together with user identification

information corresponding to said user **[col.5, lines 55-62 and col.7, lines 6-13]**

through a network to a service providing site **[col.2, lines 10-15 and col.9, lines

34-67],** and one or a plurality of user terminals transmits a first calculation result

obtained by applying a given numeric value to said numerical calculation method

through said network to said service providing site; and **[col.10, lines 23-50]**

one or a plurality of service providing sites to register said numerical

calculation method together with said user identification information

corresponding to said user to transmit an arbitrary numeric value through said

network to said user terminal when said user identification information is transmitted from said user terminal through said network **[col.8, lines 55 – col.9, line 9]** and to judge, when said first calculation result corresponding to said arbitrary numeric value is transmitted from said user terminal through said network **[col.6, lines 40-50 and col.8, lines 3-19]**, whether said first calculation result equals a second calculation result which is obtained by one or a plurality of service providing sites applying said arbitrary numeric value to said registered numerical calculation method, to perform said user authentication. **[col.11, lines 23-40]**

As per new claim 12: See col.8, lines 55 – col.9, line 9 and col.11, lines 23-40; discussing wherein during user authentication information registration, said service providing site supplies said user with a plurality of numerical calculation methods and said user designates one of said plurality of numerical calculation methods to be the registered numerical calculation method.

As per new claim 13: See col.8, lines 55 – col.9, line 9 and col.11, lines 23-40; discussing wherein during user authentication information registration, said service providing site supplies said user with a plurality of numerical calculation methods and said user designates one of said plurality of numerical calculation methods to be the registered numerical calculation method.

As per new claim 14: See col.8, lines 55 – col.9, line 9 and col.11, lines 23-40; discussing wherein during user authentication information registration, said service providing site supplies said user with a plurality of numerical

calculation methods and said user designates one of said plurality of numerical

calculation methods to be the registered numerical calculation method.

As per new claim 15: See col.8, lines 55 – col.9, line 9 and col.11, lines 23-

40; discussing wherein during user authentication information registration, said

service providing site supplies said user with a plurality of numerical calculation

methods and said user designates one of said plurality of numerical calculation

methods to be the registered numerical calculation method.

As per new claim 16:   See col.8, lines 55 – col.9, line 9 and col.11, lines

23-40; discussing said registered numerical calculation method is a mathematical

expression that is solved by said user and said service providing site, using said

arbitrary numeric value provided by said service providing site.

As per new claim 17:   See col.8, lines 55 – col.9, line 9 and col.11, lines

23-40; discussing said registered numerical calculation method is a mathematical

expression that is solved by said user and said service providing site, using said

arbitrary numeric value provided by said service providing site.

As per new claim 18:   See col.8, lines 55 – col.9, line 9 and col.11, lines

23-40; discussing said numerical calculation method and said registered

numerical calculation method are a mathematical expression that is solved by

said user and said service providing site, using said arbitrary numeric value

provided by said service providing site.

As per new claim 19:   See col.8, lines 55 – col.9, line 9 and col.11, lines

23-40; discussing said registered numerical calculation method is a mathematical

expression that is solved by said user and said service providing site, using said

arbitrary numeric value provided by said service providing site.

As per new claim 20:   **See col.8, lines 55 – col.9, line 9 and col.11, lines**

23-40; discussing said registered numerical calculation method is a mathematical

expression that is solved by said user and said service providing site, using said

arbitrary numeric value provided by said service providing site.

As per new claim 21:   **See col.8, lines 55 – col.9, line 9 and col.11, lines**

23-40; discussing said numerical calculation method and said registered

numerical calculation method are a mathematical expression that is solved by

said user and said service providing site, using said arbitrary numeric value

provided by said service providing site.

Response to Arguments

5.   **Applicant's arguments filed 4/27/2006 have been fully**

considered but they are not persuasive.

The claimed numerical calculation method is broad that fails to further limit

what constitutes a numerical calculation method. Thus, a numerical calculation

method can reasonably be a PIN/password, public code encryption, random

algorithms or random length strings because these are methods that consists

of calculations relating to numbers (col.10, lines 8-10).

Marchant discloses the random sets of bits is for use in encryption where

set indicates the length of the string within the message to be encrypted by a

particular encryption algorithm and the length could indicate a number of bits,

bytes, characters, words, etc. (col.8, lines 57-66). Marchant discloses that

the second set of bits represents another binary number that indicates an

encryption algorithm identifier where this identifier is used by a server computer

or a host computer to identify an encryption algorithm to use (col.9, lines 1-10).

Further, Marchant teaches the data site associates each of the multiple

encryption algorithms with a unique encryption algorithm identifier where each

encryption algorithm is assigned a unique number (col.10, lines 8-35). Therefore,

Marchant's the encryptions and random algorithms reads on the claimed

numerical calculation method and the assigned number for the encryption reads

on the claimed arbitrary numeric value to the registered numerical calculation

method on the data site side that is to be transmitted to the user.

Authentication information is also broad because authentication

information can reasonably be interpreted as any type of information used to

authenticate to allow access. Authentication information can be passwords, PIN,

code that is used to gain access. Marchant discusses transmitting passwords

and public code when generated can have a combination of words and numbers

(col.7, lines 16-17). Passwords and encryption or algorithms are stored so that

they are used for comparison results (col.9, lines 50-54). The public code is

arbitrary number information because the code was generated by the data site

and transmitted to the user to use as a combination with the PIN and will be

entered by the user to obtain the calculation result. Marchant also discusses

transmitting public code to the user where the password and public code is used

to produce a first entry point into the encryption schema associated to the user

PIN (col.7, lines 20-26). Marchant discloses that the encrypted information has

been transmitted to the user's computer and the user has received the public

code. The user then enters the PIN and selects the public code to enter the

public code on the number input device of the security unit where the PIN and

the public code as a combination to obtain the entry point into the encryption

schema (col.12, lines 10-24). Marchant shows the process of the security

unit using the first entry point to obtain three set of information corresponding to

first length of string, encryption algorithm identifier and relative address from the

encryption schema where one method of obtaining the three sets of bits is where

the combined public code and user PIN are then processed. The result is then

utilized to identify the corresponding lengths, algorithms and relative addresses

(col.12, lines 36-64). The public code (arbitrary number) that was transmitted

from the user relates to the encryption algorithm (numeric calculation method)

and a determination result to the second stored encryption algorithm (col.16,

lines 57-64 and col.17, lines 5-12). Marchant has shown that the first calculation

result consists of the public code and user PIN where this is the arbitrary numeric

value that points to the encryption. Thereby is the first calculation result that has

access to the same set of random bits that the data site has used to encrypt the

message sent to the computer (col.7, lines 27-32). Marchant further discusses

the second calculation result is the random sets of bits is used for decryption

where the decryption information is in conjunction with the encryption algorithm

stored in order to decrypt the data. Thus, Marchant discloses the first result must

equal to the second calculation result in order to be able to decrypt the data.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the

extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to

expire THREE MONTHS from the mailing date of this action. In the event

a first reply is filed within TWO MONTHS of the mailing date of this final

action and the advisory action is not mailed until after the end of the

THREE-MONTH shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the

mailing date of the advisory action. In no event, however, will the

statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LHa

HOSUK SONG
PRIMARY EXAMINER